UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,458	07/17/2006	Johan Dawid Kruger	047717/317710	4618

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EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/550,458	KRUGER ET AL.
	Examiner	Art Unit	
	BRYAN WRIGHT	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 July 2006</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>25-48</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>25-48</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>26 September 2005</u> is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/26/2005</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20080714

DETAILED ACTION

1.   This action is in response to the original filing of July 17, 2006. Claims (25-48)

are pending and have been considered below.

Priority

2.   Applicant's claim for benefit of foreign priority under 35 U.S.C. 119 (a) - (d) is

acknowledged.

The application is filed on July 17, 2006 but is a 371 case of PCT/IB04/50341

application filed 03/26/2004 and has a foreign priority application filed on 03/26/2003.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 25-32 and 36-48 are rejected under 35 U.S.C. 102(b) as being

anticipated by Baldwin (WO 01/57807 (cited from IDS)).

4.   As to claim 25, Baldwin teaches **a electronic identification system**

comprising:

a plurality of transponders (i.e., ... teaches RFID reader can interrogate

multiple tags virtually simultaneously [pg. 6, lines 10-15]);

at least one transponder encoder for writing respective first watermark data

into a memory arrangement of each transponder (i.e., ... teaches a RFID writer [pg.

6, lines 5-10]);

at least one verifier for interrogating a selected transponder and to read

data stored in the transponder (i.e., ... teaches a RFID reader [pg. 6, lines 5-10]);

said first watermark being derived from an algorithm and input (i.e., ... teaches

cryptography algorithm and data set. ... teaches applying algorithm to obtain security

block [pg. 2, 25-30]);

the verifier comprising computing means configured to retrieve the

algorithm and the input data and to compute second watermark data for

comparison with the first watermark data (i.e., teaches authentication comparison

practice [pg. 3, lines 20-32]).

5.   As to claim 26, Baldwin teaches **a electronic identification system where the**

algorithm is an encryption algorithm and the input data is at least one of a

constant and a variable (i.e., ... teaches tag data representative of owner [pg. 5, lines

15-25] Said tag data representative of owner information created by applying a

transformation (i.e., algorithm) to data [pg. 2, lines 20-30]);.

6.   As to claim 27, Baldwin teaches **a electronic identification system including**

at least one reader for reading the data transmitted, the reader not comprising

the computing means configured as aforesaid (i.e., ... teaches a RFID reader [pg. 6, lines 5-10]).

7.   As to claim 28, Baldwin teaches **a electronic identification system where said at least one verifier is used for verification of the authenticity of a transponder and said at least one reader is merely for reading data transmitted by the transponder when interrogated** (i.e., ... teaches authentication of tag security block [pg. 9, lines 5-25] ... teaches a RFID reader [pg. 6, lines 5-10]).

8.   As to claim 29, Baldwin teaches **a electronic identification system as claimed in where the data transmitted by the transponder comprises the first watermark data and identification code data associated with the transponder** (i.e., ... teaches a authentication base on a identifier and security block [pg. 3, lines 20-32]).

9.   As to claim 30, Baldwin teaches **a electronic identification system where at least one verifier utilizes said identification code data to retrieve the algorithm and the input data from memory means of the verifier** (i.e., ... teaches a variable tag memory for user manipulation [pg. 6, lines 1-4] ... teaches variable tag memory contains owner related information [pg. 5, lines 15-20] ... teaches determining authentication bases on contents stored in the variable tag memory [pg. 6, lines 5-15]).

10.   As to claim 31, Baldwin teaches **a electronic identification system where at least part of the input data is alternatively or in addition derived from sensor means response to a parameter of the response signal or a communications channel with the transponder** (i.e., ... teaches a variable tag memory can be written with information provided by a system or input [pg. 6, lines 1-5]).

11.   As to claim 32, Baldwin teaches **a method of authenticating a transponder of an electronic identification system, the method comprising the steps of:**

writing into a memory arrangement of the transponder first watermark data derived from an algorithm and input data for the algorithm (i.e., ... teaches stored security block [pg. 2, lines 25-33]);

interrogating the transponder by causing the transponder to transmit to a verifier a response signal comprising data stored in the memory arrangement of the transponder (i.e., ... teaches interrogating practice [pg. 6, lines 10-15] ... teaches tag authentication [pg. 2, lines 20-30]);

utilizing at the verifier the transmitted data to retrieve the algorithm and the input data (i.e., ... teaches a tag address and data set used to obtain a security block [pg. 2, lines 25-33]);

utilizing the retrieved algorithm and input data to compute second watermark data [pg. 2, lines 25-33]);

**and comparing the first watermark data and the second watermark data to
give an indication of the authenticity of the transponder** (i.e.., teaches
authentication comparison practice [pg. 3, lines 20-32]).

12.   As to claim 36, Baldwin teaches a **method where said algorithm and said
input data for said algorithm are stored in the verifier in relation to identification
code data of the transponder** [pg. 2, lines 25-33]).

13.   As to claim 37, Baldwin teaches a **method where the input data is arbitrarily
selected data and is changed by the encoder from time to time** (i.e., ... teaches a
various applicable application functions [pg. 5, lines 15-21]).

14.   As to claim 38, Baldwin teaches a **method where the data transmitted to the
verifier in the response signal comprises identification code data of the
Transponder** (i.e., ... teach specific information associated with a specific system [pg.
2, lines 6-21]).

15.   As to claim 39, Baldwin teaches a **method where the identification code data
is utilized by the verifier to retrieve said algorithm and said input data** [pg. 2, lines
25-30].

16.   As to claim 40, Baldwin teaches a **method where the input data for said algorithm further comprises data derived by the verifier from a parameter of said response signal or a communications channel with the transponder** (i.e., ... teaches tag address and data set inclusive to a cryptographic transformation [pg. 2, lines 25-30]).

17.   As to claim 41, Baldwin teaches a **method where the step of comparing the first watermark data and the second watermark data is performed on the verifier** (pg. 2, lines 28-33), **the first watermark data being transmitted by the transponder to the verifier** (i.e.., ... teaches use of RFID containing security block data [pg. 2, lines 24-27]).

18.   As to claim 42, Baldwin teaches a **method where the step of comparing the first watermark data and the second watermark data is performed on the transponder** (pg. 2, lines 28-33), **the second watermark data being computed on the verifier and then transmitted to the transponder where the comparison is performed** (i.e., ... teaches RFID tag containing security block [pg. 2, lines 24-30]), **the transponder then providing the indication of the authenticity of the transponder** (i.e., ... teaches taking appropriate action base on authenticity results [pg. 10, lines 9-11]).

19.   As to claim 43, Baldwin teaches a **verifier for authenticating a transponder,**

comprising a transmitter for transmitting an interrogation signal to the

transponder [pg.6, lines 10-15], **a receiver for receiving a response signal from the**

transponder [pg. 6, lines 9-10], **the response signal carrying or embodying ID code**

data of the transponder (pg. 2, lines 6-21), a controller for utilizing the ID

code data to retrieve from a memory arrangement an algorithm and input data

associated with the transponder, **and processing means for deriving computed**

watermark data from the retrieved algorithm and associated input data (i.e., …

teaches cryptography algorithm and data set. … teaches applying algorithm to obtain

security block [pg. 2, 25-30]).

20.   As to claim 44, Baldwin teaches a **verifier where the verifier is arranged to**

transmit the computed watermark data to the transponder for comparison with

stored watermark data stored within the memory of the transponder [pg. 2, lines

24-29].

21.   As to claim 45, Baldwin teaches **a verifier where the verifier is arranged to**

compare the computed watermark data with stored watermark data in the memory

arrangement of the verifier [pg. 2, lines 25-32].

22.   As to claim 46, Baldwin teaches **a verifier where the retrieved algorithm is an**

encryption algorithm and the retrieved input data is at least one of a constant

and a variable (i.e., … teaches a tag address is obtained. … teaches tag address and a data set [pg. 6, lines 20-26] … teaches a cryptographic transformation algorithm [pg. 7, lines 30-35]).

23.   As to claim 47, Baldwin teaches **a transponder for use in an electronic identification system, comprising a transmitter for sending a response signal to a verifier** (pg. 6, lines 7-15), **the response signal carrying or embodying ID code data of the transponder** (i.e., … teaches a security block inclusive a address and data set [pg. 2, lines 24-33]), **a receiver for receiving from the verifier computed watermark data derived from a retrieved algorithm and associated input data in the memory arrangement of the verifier** (pg. 6, lines 7-15), **and processing means for comparing the computed watermark data with stored watermark data stored within the memory of the transponder** [pg. 2, lines 30-33], **to establish authentication of the transponder** [pg. 10, lines 9-11].

24.   As to claim 48, Baldwin teaches **a transponder arranged to transmit an authenticity signal to the verifier indicative of the authenticity or otherwise of the Transponder** [pg. 10, lines 9-11].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

25.   Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin in view of Rhoads (US Patent Publication No. 2004/0022444).

26.   As to claims 33-35, the system disclose by Baldwin shows substantial features of the claimed invention (discussed in the paragraphs above), It fails to disclose:

A method where the first watermark data is generated by an encoder and is written into the memory arrangement of the transponder (claim 33).

A method where the encoder is connectable to a central station for downloading into a memory arrangement of the encoder a set of algorithms comprising said algorithm (claim 34).

A method where the central station and/or encoder are further configured

to write the set of algorithms and input data for the set of algorithms into a

memory arrangement of the verifier (claim 35).

However, these features are well known in the art and would have been an obvious

modification of the system disclosed by Baldwin as introduced by Rhoads. Rhoads

discloses:

> **A method where the first watermark data is generated by an encoder and is**
>
> **written into the memory arrangement of the transponder** (claim 33) (for
>
> purposes of watermark generation Rhoads provides a encoder generated output
>
> identification signal (i.e., watermark) [fig. 5]).

> **A method where the encoder is connectable to a central station for**
>
> **downloading into a memory arrangement of the encoder a set of algorithms**
>
> **comprising said algorithm** (claim 34) (for downloading purposes Rhoads
>
> provides a encoder inclusive of memory [Appendix A, fig. 3]).

> **A method where the central station and/or encoder are further configured**
>
> **to write the set of algorithms and input data for the set of algorithms into a**
>
> **memory arrangement of the verifier** (claim 35) (for a encoder configuration
>
> Rhoads provides encoder operation [Appendix A]).

Therefore, given the teachings of Rhoads, a person having ordinary skill in the art at the

time of the invention would have recognized the desirability and advantage of modifying

Baldwin by employing the well known features of encoder generated identification

output signal disclosed above by Rhoads, for which watermark generation will be

enhanced [Appendix A, fig. 3].

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BRYAN WRIGHT whose telephone number is (571)270-

3826. The examiner can normally be reached on 8:30 am - 5:30 pm Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, AYAZ Sheikh can be reached on (571)272-3795. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRYAN WRIGHT/
Examiner, Art Unit 2131
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